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EXAMINER PHAM, MICHAEL				
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2167				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/786,863

**Applicant(s)**

GROENENDAAL ET AL.

**Examiner**

MICHAEL PHAM

**Art Unit**

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 15-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. In view of the Pre-Appeal Conference Request filed on 12/17/08, PROSECUTION IS HEREBY REOPENED. A new grounds of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/John R. Cottingham/

Supervisory Patent Examiner, Art Unit 2167.

***Claim Status***

2. Claims 1-11 and 15-23 are pending
3. Claims 1-11 and 15-23 have been examined.

***Claim Objections***

4. Claims 1, 3, 9, and 16 are objected to because of the following informalities: Claims 1 and 9 all recite several instances of the phrase "operable to" which suggests or makes optional but does not require the steps to be performed or does not limit a claim to a particular structure. See MPEP 2111.04. Limitations, as is, are not being positively claimed, the examiner suggests replacing the phrase with the terms "configured to".

*Claim Rejections - 35 USC § 101*

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claims 1-8 and 15-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

MPEP 2106:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best functional descriptive material per se.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material". Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e. abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer"

Claim 1 recites "apparatus". However, claim 1 fails to contain any computer hardware that is used to implement the system so as to realize its functionality. Thus, the body of claim 1 is merely an abstract idea and is being processed without any computer hardware manipulation. Contrary to arguments made by some Applicants, use of the word "apparatus" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the apparatus is a physical part of a device can the apparatus as claimed constitute part of a device or a combination of devices to be a machine within the meaning of 101. Furthermore, while the apparatus recites "embodied in a machine-readable medium", the machine-readable medium is at best for use with the claimed system.

**7. Claims 9 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The claims fail to place the invention squarely within one statutory class of invention. The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. In

other words, the “machine readable medium” is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of Substances and therefor not a composition of matter.

**8. Claims 10 and 17-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The claims fail to place the invention squarely within one statutory class of invention. The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. *See* MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. In other words, the “machine readable medium” is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of Substances and therefor not a composition of matter.

**9. Claims 21 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

MPEP 2106:

The claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 U.S.C. 101. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best functional descriptive material per se.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material". Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming nonfunctional descriptive material, i.e. abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer"

Claim 21 recites "system". However, claim 21 fails to contain any computer hardware that is used to implement the system so as to realize its functionality. Thus, the body of claim 21 is merely an abstract idea and is being processed without any computer hardware manipulation. Contrary to arguments made by some Applicants, use of the word "system" does not inherently mean that the claim is directed to a machine. Only if at least one of the claimed elements of the apparatus is a physical part of a device can the apparatus as claimed constitute part of a device or a combination of devices to be a machine within the meaning of 101. Furthermore, while the claim recites "a processor", a processor by definition covers software embodiments (see IEEE the authoritative dictionary of IEEE standard terms seventh edition: processor – software – a

computer program that includes the compiling assembling translating and related functions for a specific programming language).

**10. Claims 22 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claim 22 fails to fall within a statutory category of invention. It is directed to the program itself, not a process occurring as a result of executing the program, a machine programmed to operate in accordance with the program nor a manufacture structurally and functionally interconnected with the program in a manner which enables the program to act as a computer component and realize its functionality. It's also clearly not directed to a composition of matter. Therefore, it's non-statutory under 35 USC 101.

**11. Claims 23 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

The claims fail to place the invention squarely within one statutory class of invention. The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. *See* MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. In other words, the “machine readable medium” is drawn to a form of energy. Energy is not one of



the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of Substances and therefor not a composition of matter.

***Claim Rejections - 35 USC § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

13. **Claims 1-11 and 15-23 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent Application Publication 2002/0143755 by Wynblatt et. al. (hereafter Wynblatt).**

**Claim 1 :**

Wynblatt discloses the following claimed limitations:

“a relational interface embodied in a machine-readable medium and operable to receive a relational query from a software application requesting network management information from a specified network device;”[See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data

sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, a relational interface (figure 1 element 30/20) embodied in a machine-readable medium (figure 1) and operable to receive a relational query (0052, traditional database query) from a software application (figure 1 element 25/30) requesting network management information (data) from a specified network device (figure 1 element 30/20)]

“a relational mapper embodied in a machine-readable medium and operable to translate the relational query received through the relational interface from the software application, to native protocol messages according to an access protocol associated with the network device; and”[0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, a relational mapper (0051, A. Querying node translating query into network messages) embodied in a machine-readable medium (figure 1) and operable to translate (0052, convert) the relational query received through the relational interface (0052, traditional database query) from the software application (figure 1 element 25/30), to native protocol messages (0052, network messages) according to an access protocol (0052, schema) associated with the network device (figure 1 element 30/20)]

“a protocol transaction handler embodied in a machine-readable medium and operable to handle the native protocol messages as a transaction with the network device, and return a result

of the transaction to the software application.”[See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, a protocol transaction handler (0072, Network interface response to network messages) embodied in a machine-readable medium (figure 1) and operable to handle the native protocol messages (0073, network messages) as a transaction (received/transmits) with the network device (figure 1 element 30/20) , and return a result of the transaction to the software application (transmits response message back to the appropriate querying node when the query constraints are met)]

**Claim 2 :**

Wynblatt further discloses: “wherein the relational mapper includes a relational model of the network device.”[0052, relational model]

**Claim 3 :**

Wynblatt further discloses: “wherein the relational mapper is operable to translate a query to plural messages corresponding to plural access protocols.”[figure 2 element 102 and 104. Accordingly, wherein the relational mapper is operable to translate a query (102 decomposes query into network messages) to plural messages corresponding (104, route network messages)to plural access protocols (106)]

**Claim 4 :**

Wynblatt further discloses: “wherein the relational mapper is expandable to receive queries directed to additional network devices which use other protocols different from said access protocol, transparent to said software application.”[See figure 1, 0049, and 0052. wherein the relational mapper is expandable to receive queries (traditional database queries) directed to additional network devices (figure 1 element 20/30) which use other protocols different (local schema) from said access protocol (global schema), transparent to said software application (figure 1 element 25/30)]

**Claim 5 :**

Wynblatt further discloses: “wherein the collection of information of the network device is viewed as a relational database.”[ 0052. Accordingly, wherein the collection of information of the network device is viewed as a relational database (viewed as one or more database records)]

**Claim 6 :**

Wynblatt further discloses: “wherein the relational query is independent of management and/or access protocols.”[ 0052. Accordingly, wherein the relational query (traditional database queries) is independent of management and/or access protocols (schema)]

**Claim 7 :**

Wynblatt further discloses: “wherein the translation of the relational query to native protocol messages is an abstraction transparent to said software application.”[ 0052. Accordingly, wherein the translation (convert) of the relational query (traditional database queries) to native protocol messages (network messages) is an abstraction transparent to said software application (system to convert).]

**Claim 8 :**

“wherein a form of the relational query does not depend on the access protocol to which the relational query is to be translated.”[ 0052, Accordingly, wherein a form of the relational query (parts of query) does not depend (relevant parts of each query for each data source) on the access protocol (schema) to which the relational query (traditional database queries) is to be translated (converted)]

**Claim 9 :**

Wynblatt discloses the following claimed limitations:

“A relational modeler embodied in a machine-readable medium and operable to translate a relational query from a software application requesting network management information from a specified network device, to native protocol messages according to an access protocol associated with the network device, wherein said native protocol messages is handled as a transaction with the network device.”[ See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object

instances (object oriented model) or some combination thereof, and in which the schema described above is used. See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, a relational modeler embodied in a machine-readable medium (figure 1) and operable to translate (0052, convert) a relational query (0052 traditional database query) from a software application (figure 1 element 30/25) requesting network management information (data) from a specified network device (figure 1 element 30/20), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 30/20), wherein said native protocol messages (network messages) is handled as a transaction (0072, received/transmits responses) with the network device (figure 1 element 30/20)]

**Claim 10 :**

Wynblatt discloses the following claimed limitations:

“a first segment including relational interface code to receive a relational query from a software application requesting network management information from a specified network device;”[ See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances

(object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, a first segment including relational interface code to receive a relational query (traditional database query) from a software application (figure 1 element 25/30) requesting network management information (data) from a specified network device (figure 1 element 30/20)]

“a second segment including relational mapper code to translate the relational query received from the software application, to native protocol messages according to an access protocol associated with the network device; and”[ 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, a second segment including relational mapper code to translate (convert) the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

“a third segment including protocol transaction handler code to handle the native protocol messages as a transaction with the network device, and return a result of the transaction to the software application.”[ See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, a third segment including protocol transaction handler

code to handle the native protocol messages (network messages) as a transaction (received/transmits) with the network device (figure 1 element 20/30), and return a result of the transaction (transmits response messages back) to the software application (figure 1 element 25/30)]

**Claim 11 :**

Wynblatt discloses the following claimed limitations:

“receiving a relational query from a software application requesting network management information from a specified network device;”[ See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, receiving a relational query (traditional database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30)]

“translating the relational query received from the software application, to native protocol messages according to an access protocol associated with the network device; and”[ 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and



in which the schema described above is used. Accordingly, translating (converting) the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

“handling the native protocol messages as a transaction with the network device and returning a result of the transaction to the software application.”[ See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handling the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20) and returning a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

**Claim 15 :**

Wynblatt discloses the following claimed limitations: “wherein the access protocol associated with the network device is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language; and Simple Object Access Protocol.”[0052 and 0055. Accordingly, wherein the access protocol (schema) associated with the network device (figure 1 element 20/30) is selected from a group consisting of: Simple Network Management

Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language(0055, SQL); and Simple Object Access Protocol]

**Claim 16 :**

Wynblatt further discloses: “the relational mapper operable to translate the relational query, in the form of Structured Query Language, received through the relational interface from the software application, to native protocol messages according to an access protocol, in the form of Simple Network Management Protocol, associated with the network device.”[ 0043, 0052, 0055, and figure 1. Accordingly, further comprising the relational mapper operable to translate the relational query (0052, traditional database system), in the form of Structured Query Language (0055, SQL), received through the relational interface from the software application (figure 1 element 25/30), to native protocol messages (0052, network message) according to an access protocol (0052, schema), in the form of Simple Network Management Protocol (0043, TCP/IP), associated with the network device (figure 1 element 20/30)]

**Claim 17 :**

Wynblatt discloses the following claimed limitations: “wherein the access protocol associated with the network device is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language; and Simple Object Access Protocol.” [0052 and 0055. Accordingly, wherein the access protocol (schema) associated with the network device (figure 1 element 20/30) is selected from a group consisting of: Simple Network Management

Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language(0055, SQL); and Simple Object Access Protocol]

**Claim 18 :**

Wynblatt further discloses: “relational mapper code to translate the relational query, in the form of Structured Query Language, received from the software application, to native protocol messages according to an access protocol, in the form of Simple Network Management Protocol, associated with the network device.”[ 0043, 0052, 0055, and figure 1. Accordingly, relational mapper code to translate the relational query (0052, traditional database system), in the form of Structured Query Language (0055, SQL), received from the software application (figure 1 element 25/30), to native protocol messages (0052, network message) according to an access protocol (0052, schema), in the form of Simple Network Management Protocol (0043, TCP/IP), associated with the network device (figure 1 element 20/30)]

**Claim 19 :**

Wynblatt discloses the following claimed limitations: “wherein the access protocol associated with the network device is selected from a group consisting of: Simple Network Management Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language; and Simple Object Access Protocol.”[0052 and 0055. Accordingly, wherein the access protocol (schema) associated with the network device (figure 1 element 20/30) is selected from a group consisting of: Simple Network Management

Protocol; Common Management Information Protocol; Command Line Interface; Hypertext Transfer Protocol; Structured Query Language(0055, SQL); and Simple Object Access Protocol]

**Claim 20 :**

Wynblatt further discloses: “the relational mapper operable to translate the relational query, in the form of Structured Query Language, received through the relational interface from the software application, to native protocol messages according to an access protocol, in the form of Simple Network Management Protocol, associated with the network device.”[ 0043, 0052, 0055, and figure 1. Accordingly, wherein translating the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30) comprises translating the relational query (converting), in the form of Structured Query Language (SQL), received from the software application (figure 1 element 30/25), to native protocol messages (network messages) according to an access protocol (schema), in the form of Simple Network Management Protocol (TCP/IP), associated with the network device (figure 1 element 20/30)]

**Claim 21 :**

Wynblatt discloses the following claimed limitations:

“a processor; and”[figure 1]

“a program storage device readable by the computer system, tangibly embodying a program of instructions executable by the processor to:”[figure 1]

“receive a relational query from a software application requesting network management information from a specified network device;”[ See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, receive a relational query (traditional database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30)]

“translate the relational query received from the software application, to native protocol messages according to an access protocol associated with the network device; and”[ 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translate (converting) the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

“handle the native protocol messages as a transaction with the network device and returning a result of the transaction to the software application.”[ See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30

includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handle the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20) and returning a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

**Claim 22 :**

Wynblatt discloses the following claimed limitations:

“receive a relational query from a software application requesting network management information from a specified network device; ;”[ See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (realtonal model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, receive a relational query (traditiaonal database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30)]

“translate the relational query received from the software application, to native protocol messages according to an access protocol associated with the network device; and” [ 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records

(relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translate (converting) the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

“handle the native protocol messages as a transaction with the network device and returning a result of the transaction to the software application.” [ See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handle the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20) and returning a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]

**Claim 23 :**

Wynblatt discloses the following claimed limitations:

“receive a relational query from a software application requesting network management information from a specified network device;” [ See figure 1 elements 20, 25, 30, and 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in

which the schema described above is used. Accordingly, receive a relational query (traditional database queries) from a software application (figure 1 element 25/30) requesting network management information (records) from a specified network device (figure 1 element 20/30)]

“translate the relational query received from the software application, to native protocol messages according to an access protocol associated with the network device; and” [ 0052, system to convert traditional database queries into network messages that are appropriate for a network of data sources in which each data source is viewed as one or more database records (relational model) or object instances (object oriented model) or some combination thereof, and in which the schema described above is used. Accordingly, translate (converting) the relational query (traditional database query) received from the software application (figure 1 element 25/30), to native protocol messages (network messages) according to an access protocol (schema) associated with the network device (figure 1 element 20/30).]

“handle the native protocol messages as a transaction with the network device and returning a result of the transaction to the software application.” [ See 0072 Network interface response to network messages. See 0073, each data producing node 20 or 30 includes either in its network interface or in the application program resident on that node the necessary software firmware that processes received network messages and transmits response messages back to the appropriate querying node when the query constraints are met. Accordingly, handle the native protocol messages (network messages) as a transaction (received/transmit) with the network device (figure 1 element 30/20) and returning a result of the transaction (transmits response back) to the software application (figure 1 element 25/30)]



***Response to Arguments***

14. Applicant's arguments with respect to claims 1-11 and 15-23 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

15. The prior art made of record listed on pto-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

***Contact Information***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PHAM whose telephone number is (571)272-3924. The examiner can normally be reached on 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 5712727079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. P./  
Examiner, Art Unit 2167

/John R. Cottingham/  
Supervisory Patent Examiner, Art Unit  
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